

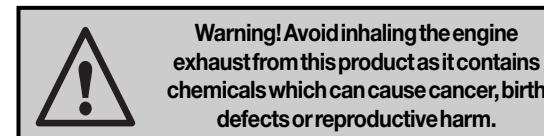


26cc Petrol hedge trimmer **GPHS-26cc**

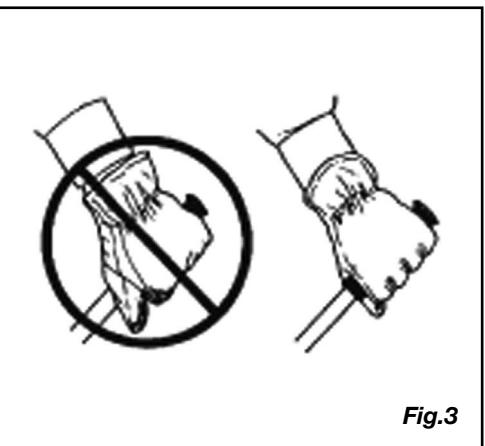
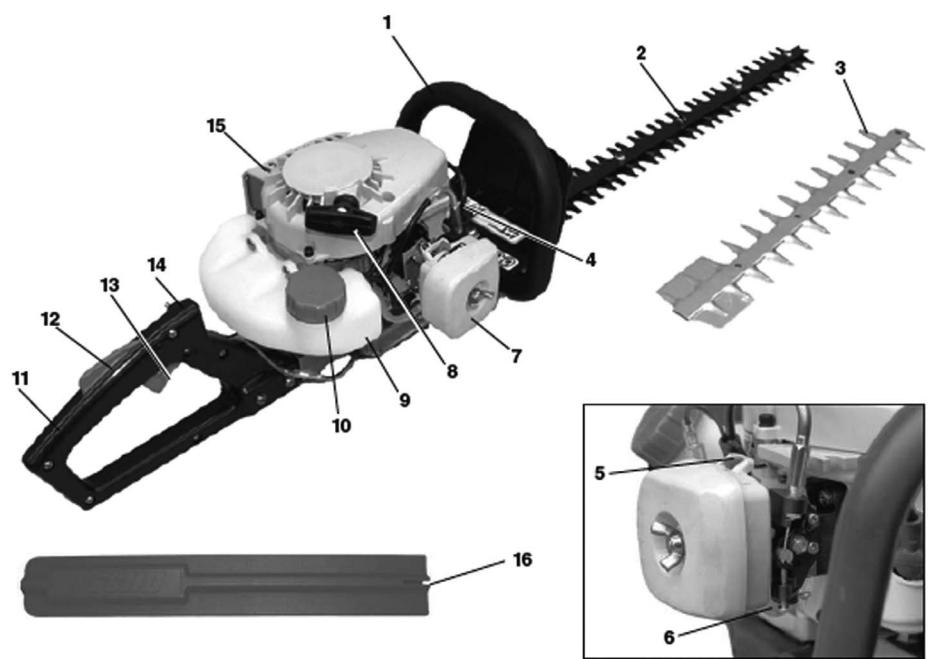
USER'S MANUAL



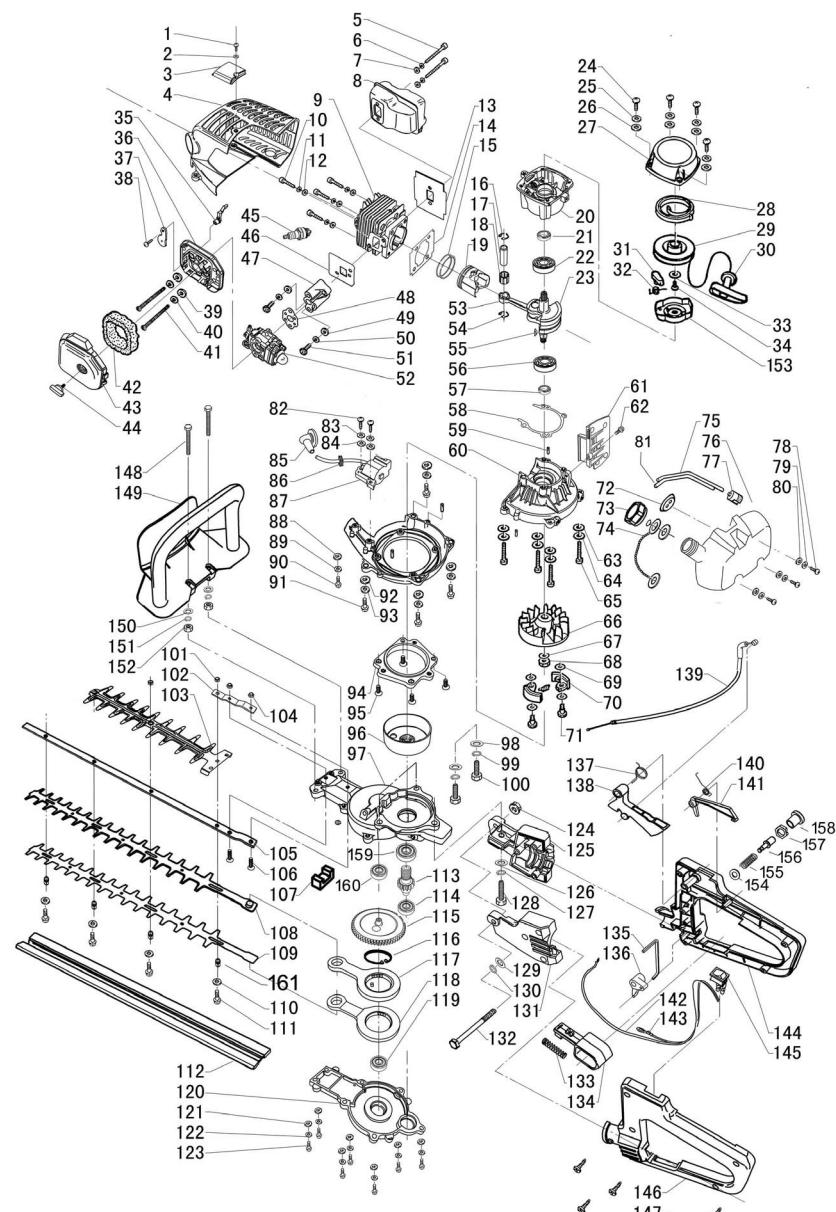
Warning! Read rules for safe operation and all instructions carefully. Gardenline provides this manual and safety instructions. Both must be read and understood for proper and safe operation.



CE



Exploded view



Spare parts list GPHS-26cc

Gardenline no.	Description	Position no.
400535	Starter complete	24 till 34 + 153
400536	Air filter	42
400537	Spark plug	45
400538	Blade complete	108,109 +(4X) 104,110,111,161
400539	Handgrip	149

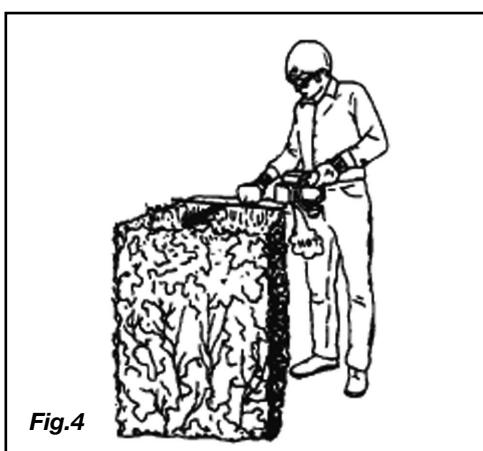


Fig.4

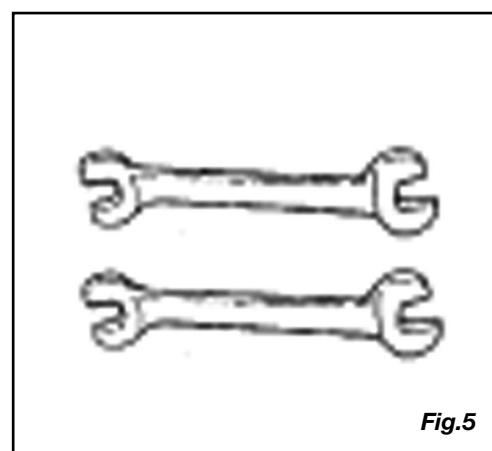


Fig.5

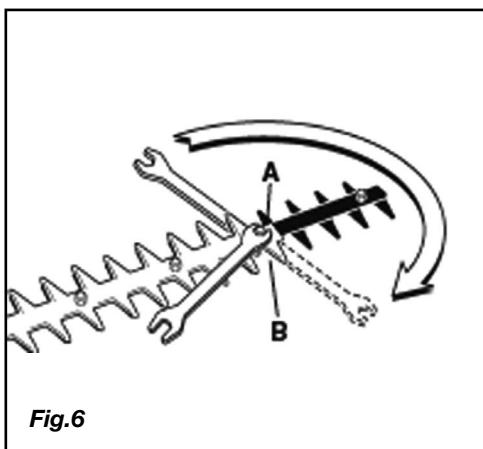


Fig.6

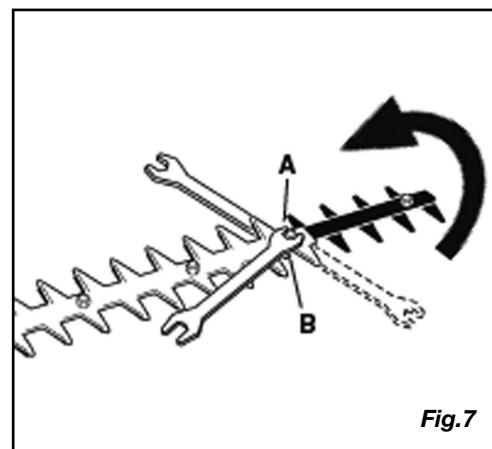


Fig.7

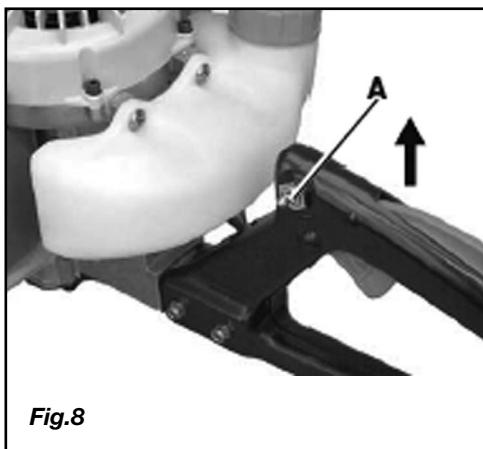


Fig.8

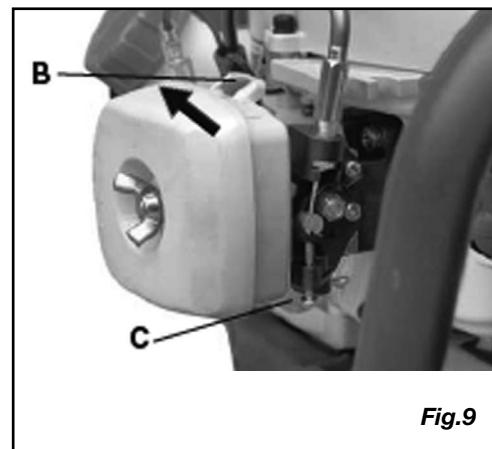


Fig.9

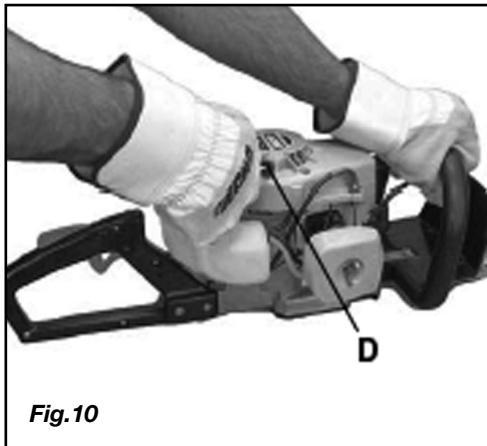


Fig.10

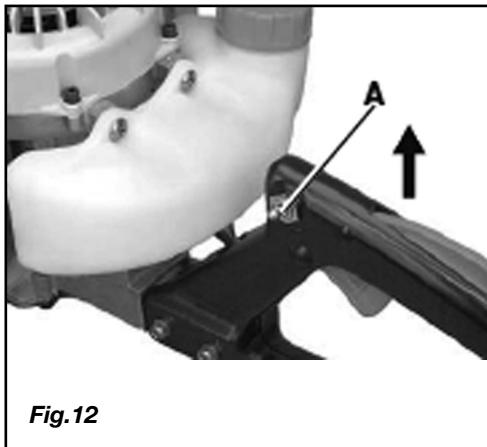


Fig.12

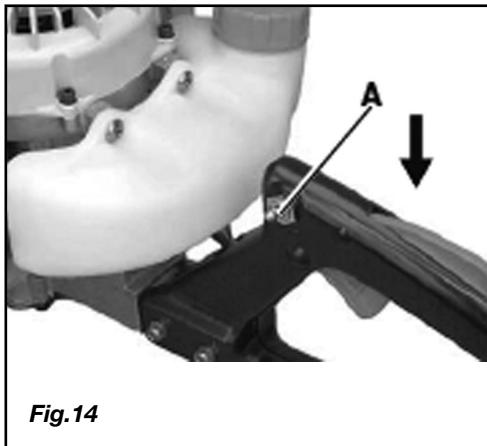


Fig.14

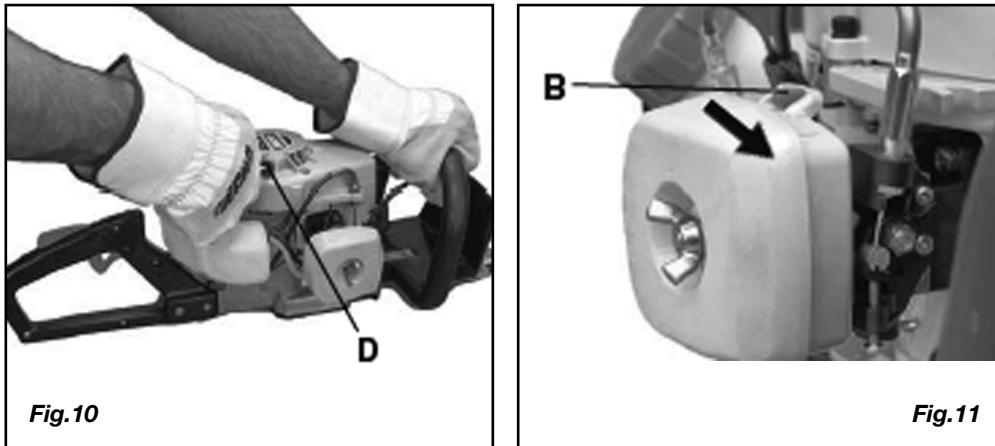


Fig.11

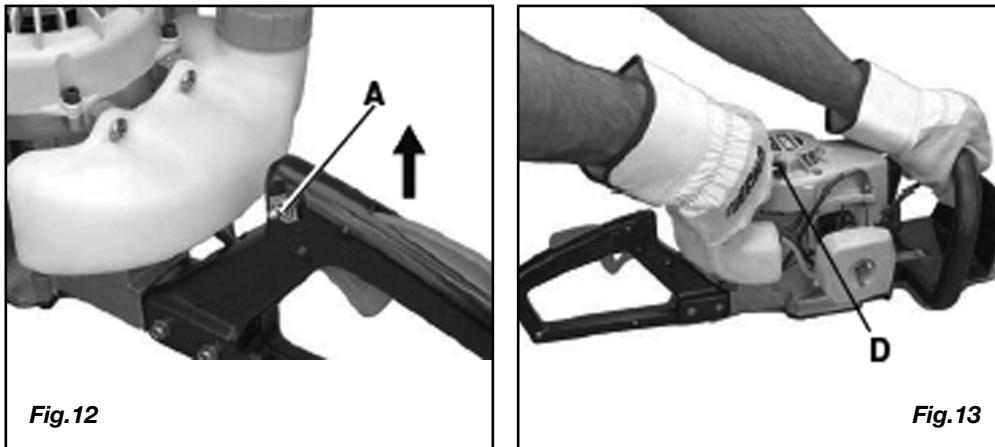


Fig.13

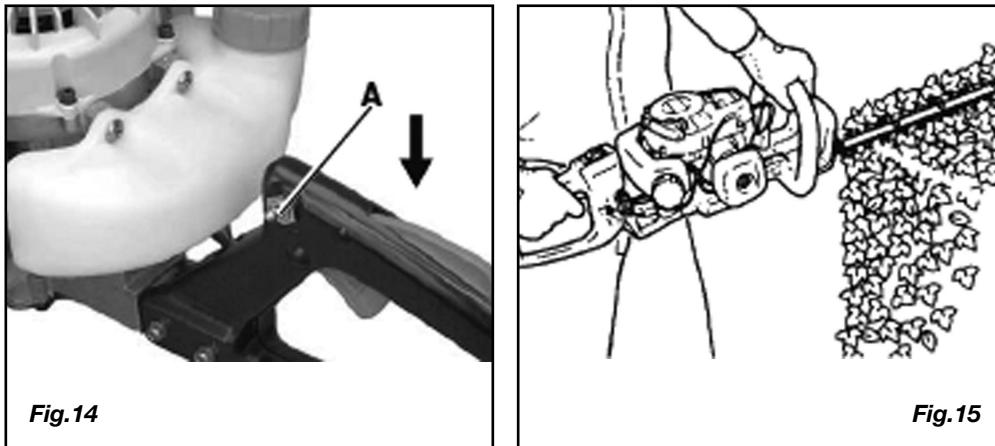


Fig.15

CE DECLARATION OF CONFORMITY (GB)

We declare under our sole responsibility that
GPHS-26cc Petrol hedge trimmer
 is in conformity with the following standards or standardized documents:

prEN ISO 10517:2003, EN 55012:2002, EN 61000-6-3:2001+A11, EN 61000-6-1:2001

in accordance with the regulations:

98/37/EC, 89/336/EEC, 93/68/EEC, 2002/88/EC, 2000/14/EC

from 01-06-2006

ZWOLLE NL

J.A. Bakker - van Ingen
 CEO Ferm BV

J. Lodewijk
 Quality Manager Ferm Global

It is our policy to continuously improve our products and we therefore reserve the right to change the product specification without prior notice.

Ferm BV • Lingenstraat 6 • 8028 PM Zwolle • The Netherlands



Warning! Fuel vapors are extremely flammable and may cause fire and/or explosion. Never test for ignition spark by grounding spark plug near cylinder plug hole, otherwise serious personal injury may result.

Storage



Warning! During operation the muffler or catalytic muffler and surrounding cover become hot. Always keep exhaust area clear of flammable debris during transportation or when storing, otherwise serious personal injury may result.

Long Term Storage (over 30 days)

Do not store your hedge trimmer for a prolonged period of time (30 days or longer) without performing protective storage maintenance which includes the following:

- Store hedge trimmer in a dry, dust free place, out of the reach of children.



Warning! Do not store in enclosure where fuel fumes may accumulate or reach an open flame or spark, otherwise serious personal injury may result.

- Place the stop switch in the "OFF" position.
- Remove accumulation of grease, oil, dirt and debris from exterior of hedge trimmer.
- Perform all periodic lubrication and services that are required.
- Apply clean oil to the entire length of the blade. Be certain the blade bolts are lubricated.
- Install blade cover on blades.
- Tighten all the screws and nuts.
- Drain the fuel tank completely and pull the recoil starter handle several times to remove fuel from the carburetor.
- Remove the spark plug and pour 7cc (1/4 oz.) of fresh, clean, two-stroke engine oil into the cylinder through the spark plug hole.
- Place a clean cloth over the spark plug hole.
- Pull the recoil starter handle 2-3 times to distribute the oil inside the engine.
- Observe the piston location through the spark plug hole. Pull the recoil handle slowly until the piston reaches the top of its travel and leave it there.
- Install the spark plug (do not connect ignition cable).

Important: Always store and transport hedge trimmers in a stable, horizontal position.

Support gear case and cutting blades to prevent excessive flexing, which may cause damage to these components. Always install blade cover when transporting or storing hedge trimmer.

Environment

To prevent damage during transport, the appliance is delivered in a solid packaging which consists largely of reusable material. Therefore please make use of options for recycling the packaging.

Warranty

For the conditions of warranty, please refer to the separately provided warranty card.

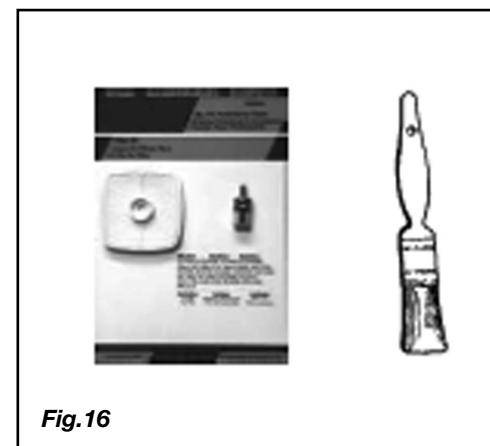


Fig. 16



Fig. 17



Fig. 18

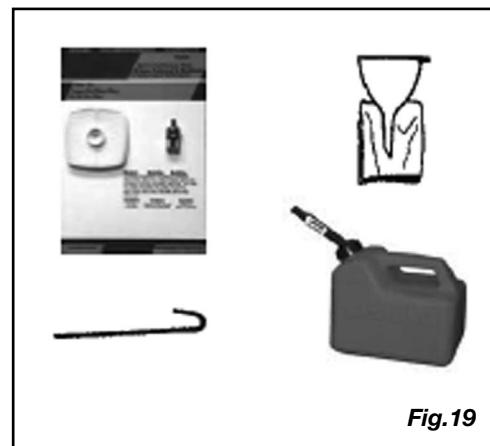


Fig. 19

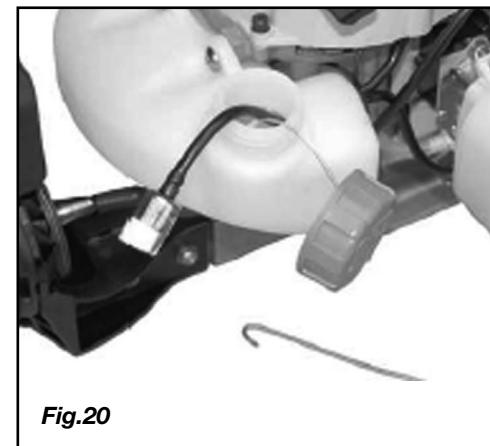


Fig. 20

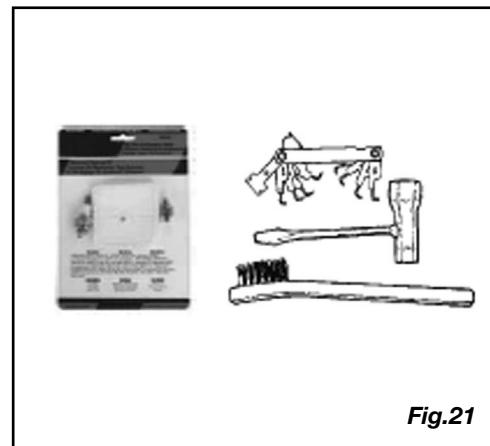
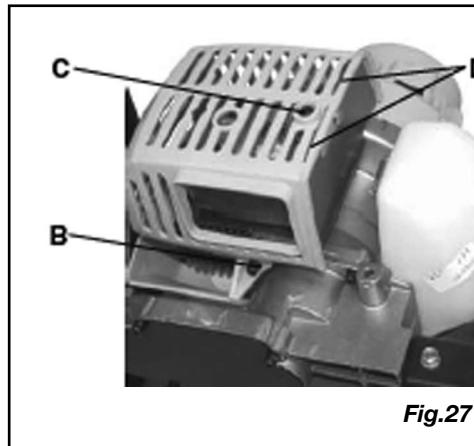
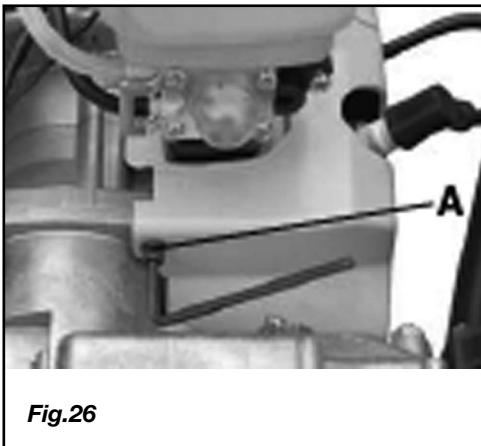
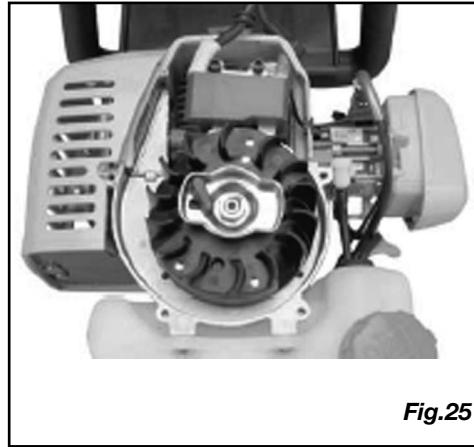
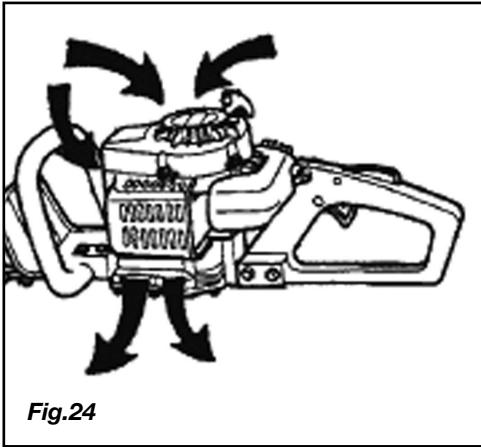
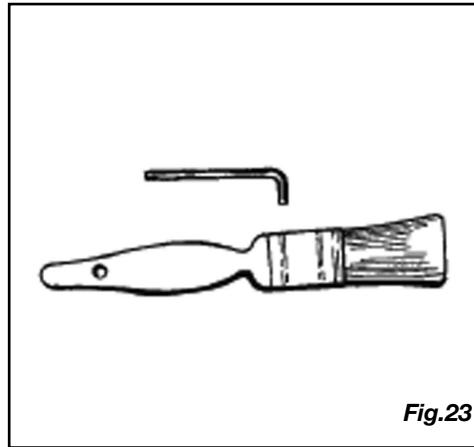
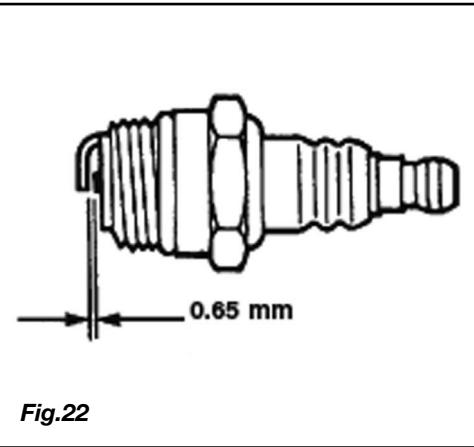


Fig. 21



Trouble shooting

Problem	Check	Status	Cause	Remedy
Engine cranks, start hard or does not start.	Fuel at carburetor.	No fuel at carburetor.	Fuel strainer clogged. Fuel line clogged. Carburetor.	Clean or replace. See address on the warranty card.
	Fuel at cylinder.	No fuel at cylinder.	Carburetor.	See address on the warranty card.
	Muffler wet with fuel.	Fuel mixture too rich.		Open choke. Clean or replace air filter. Adjust carburetor. See address on the warranty card.
	Spark at end of plug wire.	No spark.	Stop switch off. Electrical problem. Interlock switch.	Turn switch to On. See address on the warranty card.
	Spark at plug.	No spark.	Spark gap incorrect. Covered with carbon. Fouled with fuel. Plug defective.	Adjust to 0.65 mm (0.026). Clean or replace. Clean or replace. Replace plug.
Engine runs, but dies or does not accelerate properly.	Air filter. Fuel filter.	Air filter dirty. Fuel filter dirty	Normal wear. Contaminants or residues in fuel.	Clean or replace. Replace.
	Fuel vent.	Fuel vent plugged.	Contaminants or residues in fuel.	Clean or replace.
	Spark plug.	Plug dirty or worn.	Normal wear.	Clean and adjust or replace.
	Carburetor.	Improper adjustment.	Vibration	Adjust.
	Cooling system.	Cooling system dirty or plugged.	Extended operation in dusty or dirty locations.	Clean.
	Spark arrestor screen.	Spark arrestor screen plugged.	Normal wear	Replace.
Engine does not crank	N/A	N/A	Internal engine problem.	See address on the warranty card.

- Clean dirt from the grease fitting (A).
- Carefully pump grease into fitting (A). Do not force grease. Too much pressure will force grease past seals and cause damage. Apply 1-2 pumps of grease every 15-25 hours of operation.
- Wipe excess grease from around grease fitting.

Sharpening blades (Level 3)

Fig. 39 - 41

Tools required:

2 Wrenches, 10 mm

1 Flat file

1 Screwdriver

Parts required:

None



Warning! Hedge Trimmer Blades are very sharp. Wear gloves to protect hands.

- Disconnect spark plug wire.
- Remove blade stiffener (see "Blade Stiffener Remove/Install instructions").
- Slide blades to allow file clearance using slots (A) on bottom of blade. Do not pry against cutting edges.
- File each edge carefully. Follow the original shape of the blade.

Important: If a power grinder is used do not allow blade to over heat.

- Install blade stiffener (see "Blade Stiffener Remove/Install instructions").
- Lubricate blades (see "Lubrication instructions").

Important: Blades should only be removed and reinstalled by an authorized Servicing address, otherwise premature wear or internal damage may occur.



Fig.28

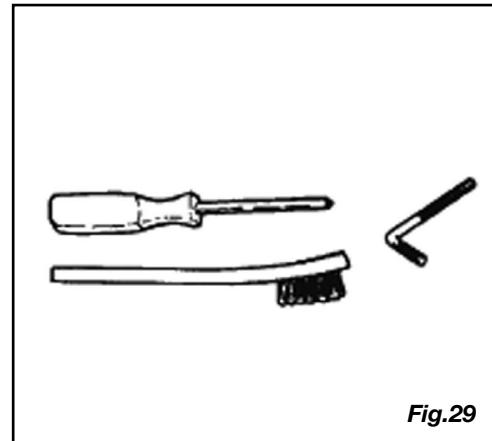


Fig.29

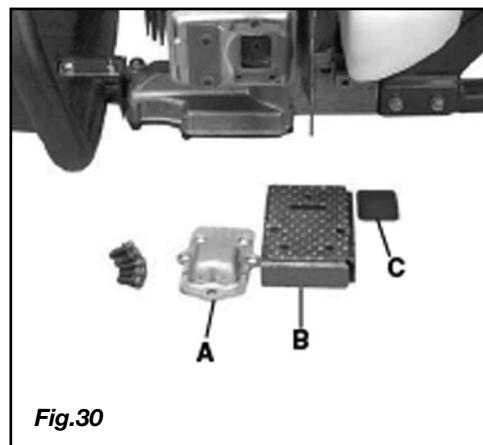


Fig.30

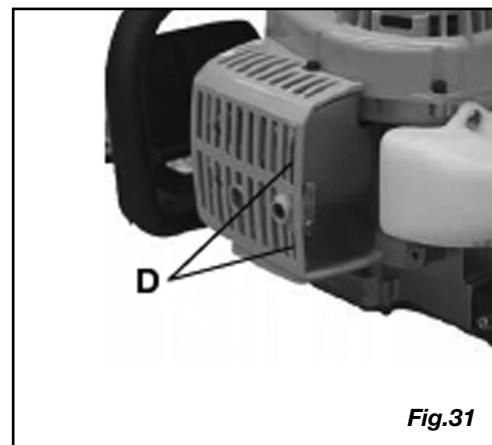


Fig.31

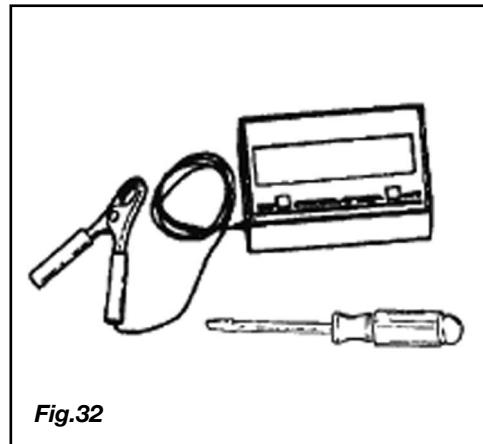


Fig.32

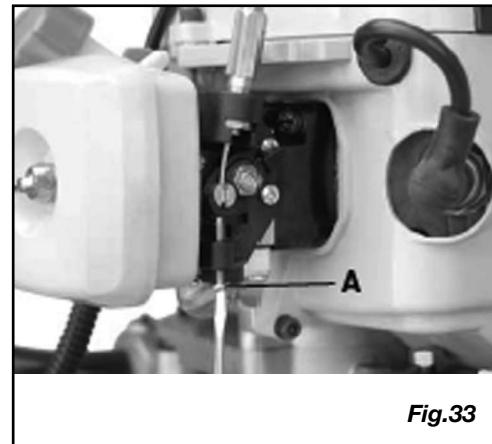


Fig.33

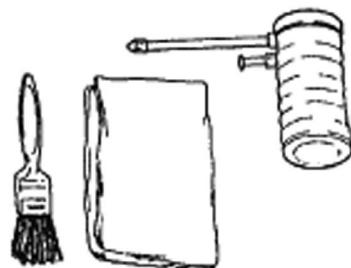


Fig.34

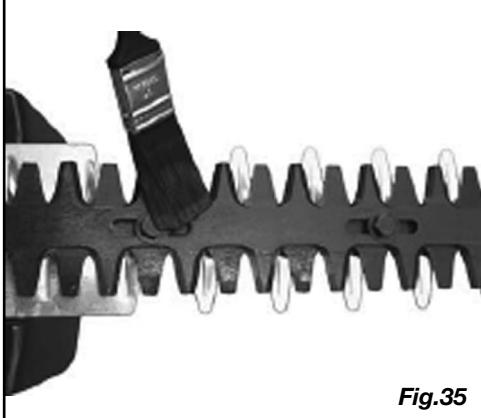


Fig.35

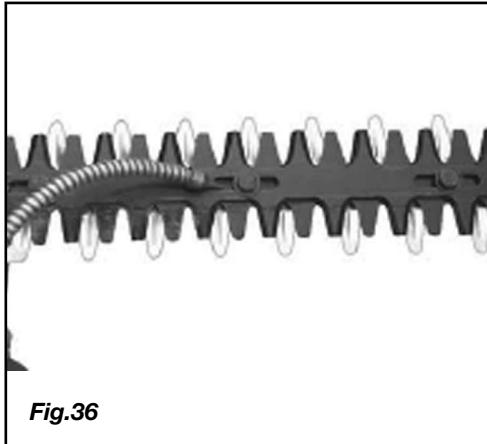


Fig.36



Fig.37

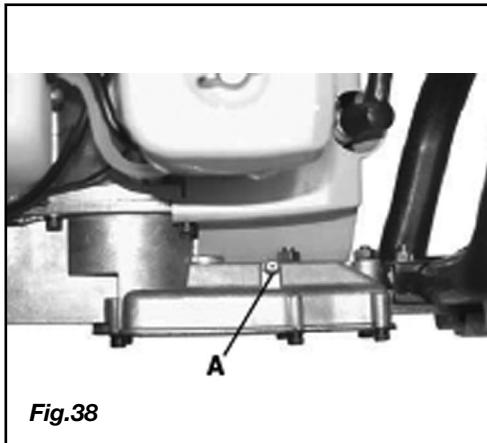


Fig.38

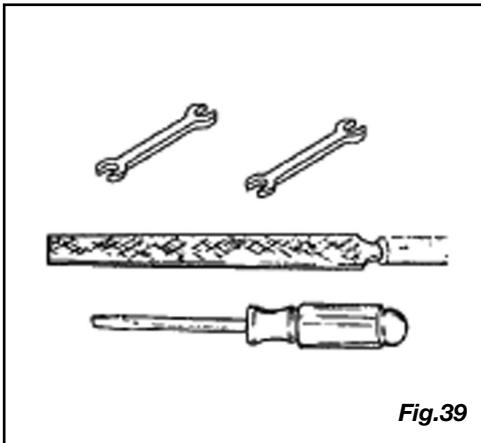


Fig.39

Parts required
None.

High altitude adjustment is not required for proper operation of this engine.

Note: Every hedge trimmer is run at the factory and the carburetor is set in compliance with emission regulations. This carburetor does not have acceleration and high-speed adjustment needles.

Check idle speed and reset if necessary. If a tachometer is available, idle speed screw (A) should be set to the specifications found in "Specifications" part of this manual. Turn idle screw (A) clockwise to increase idle speed; counter clockwise to decrease idle speed.



Warning! When carburetor adjustment is completed, the cutting attachment should not move at idle, otherwise serious personal injury may result.

Lubricating blades (Level 1)

Fig. 34 - 36

Tools required:

- 1 Clean rag
- 1 Cleaning brush, 25 mm or 50 mm (1" or 2")

Parts required:

- 1 Engine Oil, 20 W (lubrication)
- 1 Mixture of kerosene and 20W oil, 50-50 (cleaning).



Warning! Hedge Trimmer blades are very sharp. Wear gloves to protect hands.

- Disconnect spark plug wire from spark plug.
- Brush loose debris from blade and coat both sides of blade with the 50-50 cleaning mixture.
- Allow cleaning mixture to soften the remaining gummy residue then wipe it from the blade.
- Apply clean oil to the entire length of the blade. Be certain the blade bolts are lubricated.
- Wipe excess oil from the blade before putting the hedge trimmer back in service.

Lubricating gear box assembly (Level 1)

Fig. 37 - 38

Tools required:

- 1 Grease Gun
- 1 Clean rag

Parts required:

- 1 Grease , 14 oz. or Lithium based

- Assemble components in reverse order.

Note: When installing the cylinder cover, be certain the muffler gasket tabs (D) are locked into the muffler grill slots and the stop switch lead is seated in the rubber grommet.

Cylinder Exhaust Port (Level 3)

Important: The cylinder exhaust port must be inspected and cleaned of excess carbon every 3 months or 90 hours of operation in order to maintain this engine within the emissions durability period. Gardenline strongly recommends that you return your hedge trimmer to the address on the warranty card for this important maintenance service.

Spark Arrestor Screen (Level 2)

Fig. 29-31

Tools required:

- 1 Hex wrench, 3 mm
- 1 Cross Head Screwdriver
- 1 Soft metal brush

Parts required:

- 1 Screen
- 1 Gasket

- Remove engine cover. See "Cleaning Cooling System" for step by step instructions.
- Place piston at Top Dead Center (TDC) to prevent carbon/dirt from entering cylinder.
- Remove exhaust guide (A), gasket (B), and screen (C) from muffler body.
- Clean carbon deposits from muffler components.

Note: When cleaning carbon deposits, be careful not to damage the catalytic element inside muffler.

- Replace screen if it is cracked, plugged or has holes burned through.
- Assemble components in reverse order.

Note: When installing the cylinder cover, be certain the muffler gasket tabs (D) are locked into the muffler grill slots and the stop switch lead is seated in the rubber grommet.

Engine Break-In

New engines must be operated a minimum duration of two tanks of fuel break-in before carburetor adjustments can be made. During the break-in period your engine performance will increase and exhaust emissions will stabilize. Idle speed can be adjusted as required.

High Altitude Adjustment (Level 2)

Fig. 32+33

Tools required

- 1 Screwdriver
- 1 Tachometer

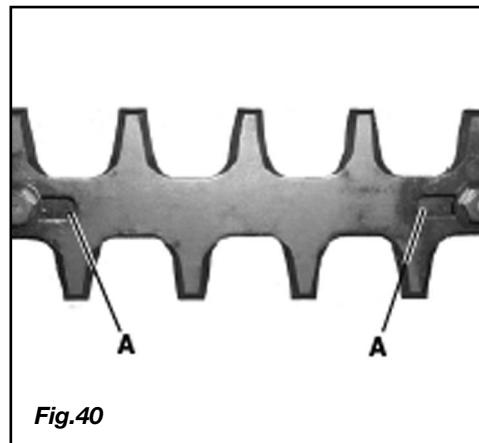


Fig. 40

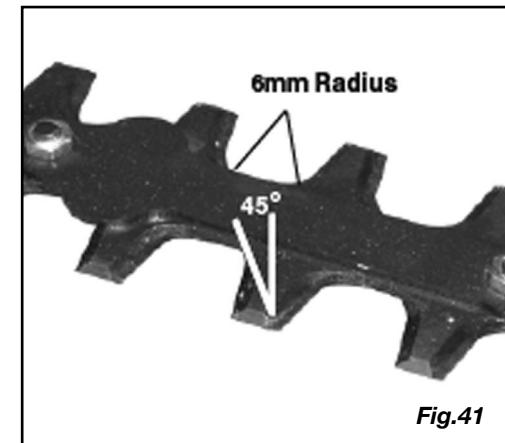


Fig. 41

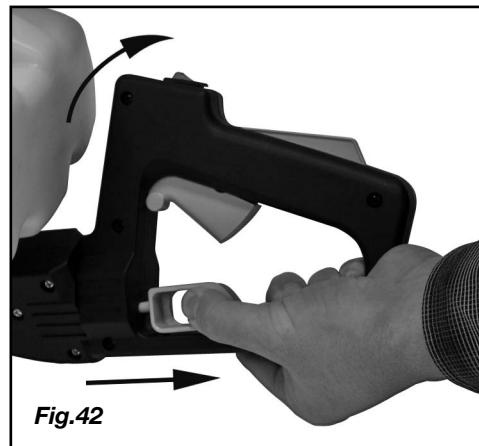


Fig. 42

PETROL HEDGE TRIMMER GPHS-26cc

The numbers in the following text correspond with the pictures at page 2-9.



Read and understand this manual before operation. Keep it in a safe place for future reference. It contains specifications and information for operation, starting, stopping, maintenance, storage, and assembly specific to this product.



Read and understand the safety instructions before operation. Keep it in a safe place for future reference. It explains possible hazards involved with the use of this product and what measures you should take to make use of this product safer.

Introduction

This Gardenline product was designed and manufactured to provide long life and on-the-job dependability. Read and understand this manual. You will find it easy to use and full of helpful operating tips and safety messages.

Specifications, descriptions and illustrative material in this literature are as accurate as known at the time of publication, but are subject to change without notice. Illustrations may include optional equipment and accessories, and may not include all standard equipment.

Contents

1. Machine data
2. Safety
3. Assembly
4. Operation
5. Maintenance

1. MACHINE DATA

Technical specifications

Length	1040 mm (41".0)
Width	240 mm (9".45)
Height	200 mm (7".87)
Weight, dry	4.98 kg (11.0 lb.)
Type of engine	Air cooled, 2-stroke, single cylinder, gasoline engine
Idle speed	2800 - 3200/min
Wide open throttle	6500 - 9000/min
Displacement	26 cc
Bore	32.2 mm (1".27)
Stroke	26.0 mm (1".02)
Exhaust system	Spark Arrestor Muffler w/catalyst
Carburetor	Zama w/purge
Ignition system	Flywheel magneto, capacitor discharge ignition

Spark plug (Level 2)

Fig. 21 + 22

Tools required:

- 1 T-wrench
- 1 Feeler gauge
- 1 Soft metal brush

Parts required:

- 1 Tune-up kit

Important: Use only NGK BPM-8Y spark plug otherwise severe engine damage may occur.

- Remove spark plug and check for fouling, worn and rounded center electrode.
- Clean the plug or replace with a new one. Do not sand blast to clean. Remaining sand will damage engine.
- Adjust spark plug gap by bending outer electrode.
- Tighten spark plug to 150-170 kg/cm (130-150 inch/lb.).

Cooling system (Level 2)

Fig. 23 - 28

Tools required:

- 1 Hex wrench 3 mm
- 1 Cleaning brush, 25 mm or 50 mm (1" or 2")

Parts required:

None if you are careful.

Important: To maintain proper engine operating temperatures, cooling air must pass freely through the cylinder fin area. This flow of air carries combustion heat away from the engine.

Overheating and engine seizure can occur when:

- Air intakes in the crankcase are locked, preventing cooling air from reaching the cylinder.
- Dust and grass build up on the outside of the cylinder. This build up insulates the engine and prevents the heat from leaving. Removal of crankcase cooling passage blockages or cleaning of cooling fins is considered "Normal maintenance." Any failure attributed to lack of maintenance is not warranted.

When overheating and engine seizure occurs do the following:

- Remove spark plug lead and spark plug.
- Remove (4) starter cover hex socket bolts and starter.
- Remove bottom right (A) and bottom left (B) hex socket bolts from cylinder cover.
- Remove heat shield bolt (C) from the muffler cover.
- Carefully pull cylinder cover forward disengaging muffler gasket tabs and ignition lead and lay aside.
- Loosely install spark plug to keep debris out of the cylinder. Use brush to remove dirt from cylinder fins.

Important: Do not use a metal scraper to remove dirt from the cylinder fins.

Maintenance procedures codes

I = Inspect
R = Replace
C = Clean

(1) = Apply lubrication every 15 - 256 hours of use
(2) = Inspect blade and clean and sharpen as needed. Lubricate blades periodically during use.

* = All recommendations to replace are based on the finding of damage or wear during inspection.

Air filter (Level 1)**Fig. 16 - 18**

Tools required:

1 Cleaning brush, 25 mm or 50 mm (1" or 2")

Parts required:

1 Air & Fuel filter kit

- Close choke in "Cold start" position. This prevents dirt from entering the carburetor throat when the air filter is removed. Brush accumulated dirt from the air cleaner area.
- Remove the air cleaner cover. Clean and inspect the element for damage. If element is fuel soaked and very dirty, replace.
- If element can be cleaned and reused, be certain it:
 - Still fits the cavity in the air cleaner cover.
 - Is installed with the original side out.

Note: Carburetor adjustment may be needed after air filter cleaning or replacement.

Fuel filter (Level 1)**Fig. 19 + 20**

Tools required:

1 Length of wire with one end bent into a hook, 200-250 mm (8-10")
1 Clean rag
1 Funnel
1 Approved fuel container

Parts required:

1 Air & fuel filter kit



Warning! Fuel is very flammable. Use extreme care when mixing, storing or handling.

- Use a clean rag to remove loose dirt from around fuel cap and empty fuel tank.
- Use the "fuel line hook" to pull the fuel line and filter from the tank.
- Remove the filter from the line and install the new filter.

Spark plug	BPM-8Y (Gap 0.65 mm (0".026)
Fuel	Mixed fuel, gasoline and oil, 25:1
Gasoline	89 Octane unleaded *
Oil	Power Blend™ premium universal
Fuel tank capacity	2-stroke oil
Starter system	0.4 L (13.5 fl. oz)
Clutch	Automatic recoil starter
Gear case ratio	Centrifugal type
Cutter	5.88:1
Length	Double reciprocating blade, double edge
Pitch	600 mm (19".3)
Height	35 mm (1".38)
Maximum diameter cut	21 mm (0".83)
Soft material	25.4 mm (1")
Woody material	13 mm (1/2")

*Do not use fuel containing methyl alcohol, more than 10% ethyl alcohol or 15% MTBE.

Package contents

After opening the carton, check for damage. Immediately notify your retailer or the address on the warranty card of damaged or missing parts. Use the contents list to check for missing parts:

1 Hedge trimmer
1 T-Wrench 13 x 19
1 Blade Stiffener
1 Blade Locknuts
1 Stiffener Washers
1 Bottle 2-stroke oil
1 Blade Cover
1 Instruction manual
1 Safety instructions
1 Warranty card

Description**Fig. 1**

Locate the safety decals on your hedge trimmer. Make sure the decals are legible and that you understand and follow the instructions on them. If a decal cannot be read, a new one can be ordered from the address on the warranty card.

1. Front handle guard

Comfortable, textured finish provides anti-slip grip for front hand. Guard protects hand from the blades. Warning decals are located on guard.

2. Blades

Double reciprocating blades mounted to a blade support bar. The blades are double sided, capable of cutting on either side.

3. Blade stiffener

Attaches to top of blades and guides material being cut into blades.

4. Spark plug

Provides spark to ignite fuel mixture.

5. Choke

The choke control lever is located on the front of the air cleaner case. Move choke lever to "Cold start" position to close the choke for Cold Starting. Move choke lever to "Run" position to open choke.

6. Primer bulb

Pumping primer bulb before starting engine draws fresh fuel from the fuel tank priming the carburetor for starting. Pump primer bulb until fuel is visible and flows freely in the clear fuel tank return line. Pump bulb an additional 4 or 5 times.

7. Air cleaner

Contains replaceable filter element.

8. Recoil starter handle

Pull handle slowly until recoil starter engages, then quickly and firmly. Do not pull rope all the way out or allow the handle to snap back, damage to the starter will occur.

9. Fuel tank

Contains fuel and fuel filter.

10. Fuel tank cap

Covers and seals fuel tank opening.

11. Rear handle

Contains Stop switch, Throttle lockout and Throttle trigger.

12. Throttle trigger lockout

This lever must be depressed before Throttle trigger can be activated.

13. Throttle trigger

Spring loaded to return to idle when released. Trigger lockout must be depressed fully before Throttle trigger will move. During acceleration, depress gradually for best operating technique.

14. Stop switch

"Toggle switch" located on the left side of the rear handle. Move switch Up to Run, Down to Stop.

15. Spark arrestor - Catalytic muffler / muffler

The muffler or catalytic muffler controls exhaust noise and emission. The spark arrestor screen prevents hot, glowing particles of carbon from leaving the muffler. Keep exhaust area clear of flammable debris.

16. Blade cover

Used to cover blades during transportation or storage. Remove blade cover before using hedge trimmer.

Emission control EPA Phase 2

The emission control system for these engines is EM/TWC (Engine and Catalyst Modification). The 300 hour emission durability compliance period is the time span selected by the manufacturer certifying the engine emissions output meets applicable emissions regulations, provided that approved maintenance procedures are followed as listed in the Maintenance Section of this manual.

Regular scheduled maintenance will help your hedge trimmer achieve that goal. If you are unsure or are not equipped with the necessary tools, you may want to take your hedge trimmer to the address on the warranty card for maintenance. To help you decide whether you want to Do-It-Yourself or have the address on the warranty card do it, each maintenance task has been graded. If task is not listed, see the address on the warranty card for repairs.

Skill levels

Level 1 = Easy to do. Most required tools come with hedge trimmer.

Level 2 = Moderate difficulty. Some specialized tools may be required.

Level 3 = Experience required. Specialized tools are required. Gardenline recommends that the hedge trimmer be returned to the address on the warranty card for service.

Gardenline offers Maintenance kits and parts to make your maintenance job easier. Just below each task heading are listed the various part numbers required for that task. See the address on the warranty card for these parts.

Maintenance intervals**Service address maintenance procedures**

Component / System	Maintenance procedure	Req'd skill level	Daily or before use	Every refuel	3 Months or 90 hours	6 Months or 270 hours	Yearly or 600 hours
Cylinder exhaust port	Inspect/clean/ decarbon	3	-	-	I C	-	-
Sharpen blades	Inspect/clean	3	I (2)	-	-	-	-

Do-It-Yourself maintenance procedures

Component / System	Maintenance procedure	Reqd skill level	Daily or before use	Every refuel	3 Months or 90 hours	6 Months or 270 hours	Yearly or 600 hours
Air filter	Inspect/clean/ replace	1	I C	-	R *	-	-
Choke	Inspect/clean	2	I C	-	-	-	-
Fuel filter	Inspect/replace	1	-	-	I	-	R *
Fuel system, leaks	Inspect/replace	1	I *	I	-	-	-
Cooling system	Inspect/clean	2	I C	-	-	-	-
Muffler spark arrestor	Inspect/replace	2	-	-	I *	-	-
Gear housing	Grease	2	I (1)	-	-	-	-
Blades	Inspect/clean	1	I C (2)	-	-	-	-
Recoil starter rope	Inspect/clean	1	I C *	-	-	-	-
Spark plug	Inspect/clean	2	-	-	I C	R *	-
Screws, nuts, bolts	Inspect/tighten/ replace	1	I R	-	-	-	-



Warning! The blades should not move at idle. If blades move, readjust carburetor according to "Carburetor adjustment" instructions in this manual or see the address on the warranty card, otherwise serious personal injury may result.

- After engine warm-up, grip the handle to depress the throttle trigger lockout, and gradually depress throttle trigger to increase engine rpm to operating speed.

Starting warm engine

Fig. 12-14

The starting procedure is the same as "Cold start" except do not close the choke.



Warning! The blades should not move at idle. If blades move, readjust carburetor according to "Carburetor adjustment" instructions in this manual or see the address on the warranty card, otherwise serious personal injury may result.

- Move stop switch (A) away from the Stop position.
- Pump primer bulb (C) until fuel is visible and flows freely in the clear fuel tank return line. Pump bulb an additional 4 or 5 times.
- Place the hedge trimmer on a flat, clear area. Grip the front handle securely with one hand, and pull the recoil starter handle (D) until engine starts.

Note: If engine does not start after 5 pulls, use "Cold Start" procedure.

Stopping engine

- Release throttle and allow engine to return to idle before shutting off engine.
- Move stop switch (A) to Stop position.



Warning! If engine does not stop when stop switch is moved to Stop position, close choke - "Cold start" position - to stall engine. Have the address on the warranty card repair Stop switch before using hedge trimmer again.

Hedge trimming

Fig. 15

- Hold trimmer firmly and squeeze throttle trigger to accelerate engine.
- Tilt trimmer so cutting teeth are angled slightly toward the hedge or shrub and proceed to cut.



Warning! Never remove hands from hedge trimmer when blades are moving.



Warning! The engine continues running even when the blades have stopped due to an obstruction. If this occurs, stop the engine, disconnect the spark cable and remove the obstruction.

5. MAINTENANCE

Your Gardenline Hedge trimmer is designed to provide many hours of trouble free service.

2. SAFETY

Manual safety symbols and important information

Throughout this manual and on the product itself, you will find safety alerts and helpful, informational messages preceded by symbols or key words. The following is an explanation of those symbols and key words and what they mean to you:

Important: The enclosed message provides information necessary for the protection of the hedge trimmer.

Note: This enclosed message provides tips for use, care and maintenance of the hedge trimmer.



This symbol accompanied by the words warning! and danger! calls attention to an act or condition that can lead to serious personal injury to operator and bystanders.



The circle with the slash symbol means whatever is shown within the circle is prohibited.



Read and understand the manual.



Wear eyes, ears and head protection.



Wear hand protection. Use two handed.



Wear slip resistant foot wear.



Emergency stop.



Choke control, "Cold Start" position (choke closed).



Choke control, "Run" position (choke open).



Fuel and oil mixture.



Finger severing.



Hot surface.



Do not smoke near fuel.



Do not allow flames or sparks near fuel.



Ignition On/Off.



Do not operate without guards in place.



Carburetor adjustment, low speed mixture.



Carburetor adjustment, high speed mixture.



Carburetor adjustment, idle speed mixture.



Primer bulb.



*Avoid all power lines. This hedge trimmer is not insulated against electrical current.
Do not operate closer than 15 M (50 ft.) from electrical hazards.*



Keep bystanders at least 4.5 meters (15 feet) away. Plan retreat path from falling objects.

Personal condition and safety equipment



Warning! Users of this product risk injury to themselves and others if the hedge trimmer is used improperly and/or safety precautions are not followed. Proper clothing and safety gear must be worn when operating hedge trimmer.

Physical condition

- Your judgment and physical dexterity may not be good:
 - If you are tired or sick;
 - If you are taking medication;
 - If you have taken alcohol or drugs.
- Operate hedge trimmer only if you are physically and mentally well.

- Do not overfill fuel tank. Wipe up spills immediately.
- Securely tighten fuel tank cap and close fuel container after refueling.
- Inspect for fuel leakage. If fuel leakage is found, do not start or operate hedge trimmer until leakage is repaired.
- Move at least 3m (10 ft.) from refueling location before starting the engine.

Mixing Instructions

- Fill an approved fuel container with half of the required amount of gasoline.
- Add the proper amount of 2-stroke oil to gasoline.
- Close container and shake to mix oil with gasoline.
- Add remaining gasoline, close fuel container, and remix.

Spilled fuel is a leading cause of hydrocarbon emissions. Some countries may require the use of automatic fuel shut-off containers to reduce fuel spillage.

After use

Do not store a hedge trimmer with fuel in its tank. Leaks can occur. Return unused fuel to an approved fuel storage container. Dispose of any unused fuel in an environmentally friendly way. Consult your local authority for appropriate methods.

Storage

Fuel storage laws vary by locality. Contact your local authority for the rules affecting your area. As a precaution, store fuel in an approved, airtight container. Store in a well-ventilated, unoccupied building, away from sparks and flames.

Important: Stored fuel ages. Do not mix more fuel than you expect to use in thirty (30) days, ninety (90) days when a fuel stabilizer is added.

Important: Stored two-stroke fuel may separate. Always shake fuel container thoroughly before each use.

Starting cold engine

Fig. 8 - 11

Note: The blade cover is used for transportation and storage. Remove blade cover before using the hedge trimmer.

- Move stop switch (A) away from the Stop position.
- Move choke (B) to the "Cold start" (closed) position.
- Pump primer bulb (C) until fuel is visible and flows freely in the clear fuel tank return line. Pump bulb an additional 4 or 5 times.
- Lay the hedge trimmer on a flat, clear area. Grip the front handle securely with one hand, and pull the recoil starter handle (D) until engine fires (or 5 pulls maximum).
- After engine fires or 5 pulls, move choke (B) to the "Run" (open) position. Restart engine if necessary and allow hedge trimmer to warm up at idle for several minutes.

Note: If engine does not start with choke in "Run" position after 5 pulls, repeat instructions 2 - 5.

Blade stiffener removal

Fig. 7

- Disconnect spark plug wire.
- Remove blade stiffener locknuts (A) and washers. Do not remove blade bolts.
- Remove blade stiffener.
- Tighten blade bolts (B) until snug, then loosen 1/2 turn.
- Secure blades with new locknuts (A). Do not allow blade bolts to turn.

4. OPERATION

Fuel Requirements

Gasoline

Use 89 Octane [R+M/2] (mid grade or higher) gasoline known to be good quality. Gasoline may contain up to 15% MTBE (methyl tertiary-butyl ether). Gasoline containing methyl (wood) alcohol is not approved.

Two Stroke Oil

A two-stroke engine oil meeting ISO-L-EGD (ISO/CD 13738) and J.A.S.O. FC Standards must be used. Gardenline brand premium Power Blend™ Universal 2-Stroke Oil meets these standards. Engine problems due to inadequate lubrication caused by failure to use an ISO-L-EGD and J.A.S.O. FC certified oil, such as premium Power Blend™, will void the two-stroke engine warranty. (Emission related parts only are covered for two years, regardless of two-stroke oil used, per the statement listed in the Emission Defect Warranty Explanation.)

Fuel to oil mix 25:1 ratio

Gas in Litre	Oil in cc.
4	160
8	320
20	800

Important: Power Blend™ Universal 2-Stroke Oil may be mixed at 25:1 ratio for application in all Gardenline engines sold in the past regardless of ratio specified in those manuals.

Handling Fuel



Warning! Fuel is very flammable. Use extreme care when mixing, storing or handling or serious personal injury may result.

- Use an approved fuel container.
- Do not smoke near fuel.
- Do not allow flames or sparks near fuel.
- Fuel tanks/cans may be under pressure. Always loosen fuel caps slowly allowing pressure to equalize.
- Never refuel a hedge trimmer when the engine is hot or running!
- Do not fill fuel tanks indoors. Always fill fuel tanks outdoors in a well ventilated area.

Wear protection

- Wear eye protection that meets ANSI Z87.1 or CE requirements whenever you operate the hedge trimmer.
- Wear no-slip, heavy-duty work gloves to improve your grip on the handle. Gloves also reduce the transmission of machine vibration to your hands.
- Wear hearing protection which meets CE requirements whenever hedge trimmer is used.

Wear proper clothing

- Wear snug fitting, durable clothing;
 - *Pants should have long legs, shirts with long sleeves.*
 - *Do not wear shorts.*
 - *Do not wear ties, scarfs or jewelry.*
- Wear protective hair covering to contain long hair.
- Wear sturdy work shoes with nonskid soles;
 - *Do not wear open toed shoes;*
 - *Do not operate hedge trimmer barefooted.*

Hot Humid Weather

Heavy protective clothing can increase operator fatigue which may lead to heat stroke. Schedule heavy work for early morning or late afternoon hours when temperatures are cooler.

Extended operation and extreme conditions

Fig. 2

It is believed that a condition called Raynaud's Phenomenon, which affects the fingers of certain individuals, may be brought about by exposure to vibration and cold. Exposure to vibration and cold may cause tingling and burning sensations, followed by loss of color and numbness in the fingers. The following precautions are strongly recommended, because the minimum exposure, which might trigger the ailment, is unknown.

- Keep your body warm, especially the head, neck, feet, ankles, hands, and wrists.
- Maintain good blood circulation by performing vigorous arm exercises during frequent work breaks, and also by not smoking.
- Limit the hours of operation. Try to fill each day with jobs where operating the hedge trimmer or other hand-held power equipment is not required.
- If you experience discomfort, redness, and swelling of the fingers followed by whitening and loss of feeling, consult your physician before further exposing yourself to cold and vibration.



Warning! Do not operate this product indoors or in inadequately ventilated areas. Engine exhaust contains poisonous emissions and can cause serious injury or death.

Repetitive Stress Injuries

Fig. 3

It is believed that overusing the muscles and tendons of the fingers, hands, arms, and shoulders may cause soreness, swelling, numbness, weakness, and extreme pain in those areas. Certain repetitive hand activities may put you at a high risk for developing a Repetitive Stress Injury (RSI).

An extreme RSI condition is Carpal Tunnel Syndrome (CTS), which could occur when your wrist swells and squeezes a vital nerve that runs through the area. Some believe that prolonged exposure to vibration may contribute to CTS. CTS can cause severe pain for months or even years.

To reduce the risk of RSI/CTS, do the following:

- Avoid using your wrist in a bent, extended, or twisted position. Instead try to maintain a straight wrist position. Also, when grasping, use your whole hand, not just the thumb and index finger.
- Take periodic breaks to minimize repetition and rest your hands.
- Reduce the speed and force with which you do the repetitive movement.
- Do exercise to strengthen the hand and arm muscles.
- Immediately stop using all power equipment and consult a doctor if you feel tingling, numbness, or pain in the fingers, hands, wrists, or arms. The sooner RSI/CTS is diagnosed, the more likely permanent nerve and muscle damage can be prevented.

Clear the work area

Fig. 4

Spectators and fellow workers must be warned, and children and animals prevented from coming nearer than 15 m (50 ft.) while the hedge trimmer is in use.

Keep a firm grip and a solid stance

Fig. 4

- Hold the front and rear handles with both hands, with thumbs and fingers encircling the handles.
- Maintain footing and balance at all times. Do not stand on slippery, uneven or unstable surfaces. Do not work in odd positions or on ladders. Do not over reach.

Turnable handle

Fig. 42

To have good control during operating, the hedge trimmer is equipped with a turnable handle. The handle can be rotated to several angles: 45° and 90° counterclockwise + 45° and 90° clockwise.

- Pull the yellow "locking"-switch backwards and rotate the handle to the desired angle.
- Release this "locking"-switch again and rotate the handle till it clicks into the correct position. The "locking"-switch will automatically return into its original position.
- Check if the handle is now locked in the new position.

Avoid Hot Surfaces

Keep exhaust area clear of flammable debris. Avoid contact during and immediately after operation.



Warning! Never perform blade maintenance procedures while engine is running.

Equipment check

Warning! Use only Gardenline approved attachments. Serious injury may result from the use of a non-approved attachment combination. Gardenline will not be responsible for the failure of cutting devices, attachments or accessories which have not been tested and approved by Gardenline. Read and comply with all safety instructions listed in this manual and safety manual.

- Check hedge trimmer for loose/missing nuts, bolts, and screws. Tighten and/or replace as needed.
- Inspect fuel lines, tank, and area around carburetor for fuel leaks. Do not operate hedge trimmer if leaks are found.
- Inspect shield for damage. Ensure that the blade stiffener is securely in place. Replace if either is damaged or missing.
- Check that the cutting attachment is firmly attached and in safe operating condition.
- Check that front loop handle and shoulder strap/or shoulder/waist harness are adjusted for safe, comfortable operation. See Assembly Section for proper adjustment.

3. ASSEMBLY

Note: For normal cutting, Gardenline strongly recommends the blade stiffener be installed. In extreme conditions, such as commercial cutting, or when cutting thick and/or dense branches, efficiency may be increased by trimming without the blade stiffener.

Fig. 5

Tools required:

2 Wrenches, 10 mm

Parts Required:

- 1 Blade stiffener
- 1 Blade lock nuts
- 1 Washers



Warning! Hedge Trimmer blades are very sharp. Wear gloves to protect hands.

Important: Follow blade bolt adjustment instructions exactly. Failure to do so could result in damage to blades or gearbox.

Install blade stiffener

Fig. 6

- Disconnect spark plug wire.
- Remove first four blade locknuts (A) closest to handle. Do not remove blade bolts.
- Tighten blade bolts (B) until snug, then loosen 1/2 turn.
- Install blade stiffener and washers. Tighten securely with new locknuts (A). Do not allow blade bolts to turn.

Note: Use new locknuts every time blade stiffener is installed.